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ABSTRACT

A number of assessment measures are available for measuring affective growth in reading. Among the factors involved in affective response to reading are attitude toward reading, interest in reading, and attitude toward specific reading programs. The most commonly used of the reactive measures of affective reading growth (those in which participants are aware that the measurement is being taken) is the self-reporting questionnaire or inventory. Inventories are available to measure elementary and secondary school students' attitudes toward leisure time reading and reading as a school subject. Other reactive measures include teacher interviews and student journals and diaries. In interpreting the results of reactive measures, it should be recognized that responses may not be a true indication of participants' behavior. Nonreactive measures (those in which participants are not aware that they are being assessed) include physical evidence regarding library use; systematic, planned observation of students, which may be aided by observation checklists or scales; spontaneous observation; and archival records reporting student attendance, library circulation, and disciplinary actions. Chances for success in assessing reading attitudes are greatest if a variety of reactive and nonreactive measures are used. (GW)

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READING INSTRUCTION: THE AFFECTIVE DOMAIN

MEASURING AFFECTIVE GROWTH IN READING

SEVENTH WORLD CONGRESS ON READING

HAMBURG, GERMANY

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The role that affective factors play in reading instruction has received growing attention in the past decade. Few reading educators would dispute the fact that how a student feels about reading will play a large part in determining the student's ultimate success in learning to read. (1) Therefore, evaluations of reading programs and instructional procedures that do not make use of appropriate measures of affective growth can no longer be considered valid assessments of reading growth.

However, it is not enough to merely insist that researchers, program evaluators and classroom teachers include in their instructional accountability a measure of the affective growth of their students. Serious attention needs to be paid to the "how" of affective measurement. How can programs or instructional procedures be evaluated in terms of affective growth? What are the existing possibilities; what are the needs for further exploration? What do we already

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know about measuring affective growth in reading and what do we yet need to know?

It seems logical to begin our discussion of how to measure affective growth in reading by examining the various ways that we can define the term affective. Once we are clear as to the possible factors that might be important to measure when making our instruction programs and procedures accountable, then we should be ready to deal with possible means of such assessment.

There are in existance in the field today a number of reactive and nonreacitve assessment measures available to researchers, program evaluators and classroom teachers. Our discussion of affective growth in reading will categorize and list the most noteworthy of these measures and will suggest additional assessment methods that hold promise in this area of measurement.

Finally, a multiple measurement model will be suggested for researchers, program evaluators and classroom teachers who are concerned with measuring the effects of instructional programs and procedures on their students affective growth in reading.

Attitude toward reading and interest in reading can be contributing factors in a student's affective response to reading. If we choose to define affective growth in terms of how a student feels about reading or what interest he/she has in reading, we might well be concerned with the student's reading habits. When and what a student reads can be an index of how that student feels about reading. Does the student often voluntarily choose reading as a leisure time activity? Does the student have a wide range of reading interests or are his/her reading tastes limited or undefined? Such a definition of affective growth would emphasize measurement

devices that would attempt to investigate and enumerate the amount of reading that a student does. It would mean that the assessment would concentrate on defining and listing students' reading habits and reading interests.

Perhaps we are interested in defining reading in a broader more global sense. What does the student not only feel about reading as a leisure time activity but as a school activity. In this case our measurement might be concerned with the student's feelings about reading compared to his/her feelings about computing, for instance, or perhaps a student's feelings or interest in reading class compared to his/her feelings or interests in math or science class.

In still another sense we might be concerned with how a student feels about, or what his/her interests are, in a definition of reading that includes many types of reading situations such as work type reading activities or recreational type reading activities.

Finally, if we define reading as a total communication process, how then does the student feel about reading stories, as compared to writing stories, or listening to stories, or telling stories.

It is also possible that our assessment needs might include the necessity to measure students' feelings or interests in a specific reading program or instructional procedure. Perhaps our assessment requirements are directly related to the affective growth that a particular program or procedure generates. Did the students have positive feelings toward the in-school free reading period? Were the classroom library books interesting or dull?

It should begin to be clear that what we need to do when we consider the measurement of affective growth in our instructional accountability is that we clearly understand what we are measuring and why we are measuring it. Although the measurement needs of reading researchers are not necessarily different from the needs of program evaluators, they can be somewhat different from the needs of the classroom teacher. Therefore, in our attempt to provide as much information as is practical on the measurement of affective growth, we will address the topic from several perspectives. In categorizing and listing noteworthy assessment measures, we will keep in mind the special needs of researchers, program evaluators and classroom teachers.

It is possible to classify assessment measures under two headings. Those evaluative measures that are reactive and those that are nonreactive. Of course, there is always an inherent danger of oversimplification when one chooses only two classifications for information. There are always gray areas and overlapping when one tries to pigeonhole something as complex as a measurement device. Nevertheless, such a classification does have merit and it ought to make more precise the discussion of existing and promising future affective measurement methods.

In a situation where reactive measures are used, the participants are aware that the measurement is being taken. Not only are they aware of the measurement or assessment but often they are active participants in the measurement. (2, 18, 29) Our discussion of reactive measures will include self-reporting questionnaires or inventories, teacher interviews and student diaries or journals.

Nonreactive measurement devices are those evaluative methods that make it possible for the participants to be unaware that they are being measured or assessed. Evaluative measures are not as clearly identified and participants do not actively participate in the measurement process. (29) Our discussion of nonreactive measures will include physical evidence, observation and archival records.

The most commonly used form of assessment currently being used by researchers, program evaluators, and classroom teachers alike is the self reporting questionnaire or inventory. (29) It is a relatively quick, inexpensive, direct way of measuring attitudes. It is possible by using a questionnaire to collect and process a great deal of data about attitudes and interests from a large number of people in a short period of time. A growing number of such questionnaires are being developed each year. Presently, there are a number of attitude measuring questionnaires that should very adequately serve the needs of reading educators.

For those educators looking for a means of measuring students' feelings toward and interests in reading as a leisure time activity, several attitude inventories exist. The Wisconsin Reading Attitude Inventory developed by Dulin and Chester (7) is designed to assess secondary school students' attitudes toward leisure time reading. The scale consists of 20 paired items where students are given a chance to indicate their preference for reading when reading is compared with other leisure time activities such as watching television or playing a musical instrument.

The Adapted Activity Preference Test developed by

Schotanus (26) and The Primary Pupil Reading Activity Inventory developed by Askov (3) both tap elementary school students' preferences for leisure time activities. By means of a picture projective technique, children choose between pictures that show leisure time reading activities and pictures that show leisure time activities that do not include reading. A child, therefore, would have an opportunity to choose between a picture that shows a child reading a book or a child playing ball or watching television. Since both of these tests require no reading or writing, they can be used with nonreaders as well as with readers.

If one's needs for assessment involve a definition of reading that is more comprehensive than merely recreational type reading or reading as leisure time activity, the available choices are even greater. A number of questionnaires and inventories exist for both elementary and secondary school students.

The Estes Reading Attitude Scale (8) assesses a student's feelings toward and interest in reading by checking on the amount of agreement the student has with such statements as "sharing books in class is a waste of time" or "most books are too long and dull." The 20 item scale has been validated for students in grades 3-12. Dulin and Chester (6, p.54) conclude the "The Estes Scale is a very powerful instrument for measuring levels of positive attitude toward books and reading."

Sartain (13) has developed The Reading Attitude Inventory to measure four aspects of reading: recreational reading, work-type reading, learning to read and the social values of reading. In answering the questionnaire validated for the elementary grades, students are forced to choose between two paired sentences such as "I do not read books from the classroom table or shelf every day" or

"I read something from the classroom book table or shelf every day".

The 25 item yes or no response questionnaire developed by the San Diego County Board of Education (25) measures attitudes toward reading by asking students to respond to questions such as, "Do you like to read recipes?" or "Do you think that most things are more fun than reading?". The San Diego County Inventory Of Reading Activities is designed to be used with students in grades one through six.

Kennedy and Halinsky's (17) 70 item Student Views On Reading measures secondary school students' feelings toward and interests in both leisure time reading and required reading. It is meant to assess a student's attitude toward a total school reading program.

The Survey Of School Attitudes developed by Hogan (14) assesses students' attitudes toward reading as a school subject by comparing students' attitudes toward reading with their attitudes toward math, science and social studies. However, for those educators interested in studying students' attitudes toward reading only, the 15 item reading part of the inventory could be administered by itself. In this instrument reading is defined in the total communication sense so questions such as, "Do you like to write to friends?" or "Would you like to tell a story to the class?", tap students' feelings toward and interests in writing and speaking as well as in reading and listening. The primary and intermediate levels of the Survey Of School Attitudes have been validated for grades one through six.

Despite the growing number of carefully designed attitude measures that are continually surfacing in the field of reading education, it is sometimes the case that existing instruments are not appropriate for the needs of a particular research problem or program evaluation. A recognition of one's particular assessment needs might well indicate that an evaluative instrument more sensitive to the needs of a specific definition of reading or of a specific instructional procedure is necessary. There are numerous models of assessment instruments in the literature that have been designed to measure specific programs or procedures. Educators looking for help in designing an instrument to assess students' attitudes toward a specific reading program or instructional practice might find Bennie's (4) Attitude Scale particulary helpful.

One should not forget, however, that item analysis of existing instruments might also reveal specific information that could have instructional implications beyond the total score of degree of positive or negative feelings toward reading that such instruments yield. For instance, how students respond to some of the specific questions on the Estes instrument would have meaningful instructional implications. Instructional decisions could be made on the basis of how students answered such questions as, "Books aren't usually good enough to finish," or "There should be more time for free reading during the school day".

Although the self reporting questionnaire is undoubtedly the quickest and often the most inexpensive method of assessing affective growth, there are numerous other methods of assessment

that should not be overlooked.

The teacher-student interactions that exist in every classroom should take advantage of opportunities for interchanges about feelings toward and interests in reading. Every reading conference or interview should deal in part, at least, with the reader's reaction to the book or reading assignment. (16, 28) Teacher questions such as, "What part of the book do you like best?" or "Would you like to read another book by this same author?", can be used to measure a student's affective response to his/her reading.

Student journals or diaries are another possible source of measuring students' attitudes toward reading. In an attempt to determine how much leisure time students spent reading Long and Henderson (21) asked their students to record in their journals how they spent their time outside of school. Activities were then classified and the amount of time spent reading was determined.

There is no question about the fact that self reporting questionnaires or inventories, teacher interviews and student journals and diaries can be important means of collecting data about students' affective responses to their reading. However, when such reactive measures are used, we must exercise caution in interpreting the results. (1, 18)

One of the major disadvantages of reactive methods of attitude measurement is that such measurement is often rather transparent. Since the subject knows that his/her feelings or attitudes are being measured, the subject is likely to modify

his/her responses.(2, 27) It is possible that attitude scales measure not so much people's true attitudes but, perhaps, their attitudes toward the questionnaire itself, the examiner or even what the subjects think they ought to respond. Even in the most carefully designed instruments it is still possible for respondents to fake their responses. As Estes (9, p.7) suggests, "People may choose to lie on such scales for fear of admitting dislike for a socially and academically accepted behavior."

Responses to attitude questionnaires may also not be a true indication of a student's actual behavior. Askov (3, p.2) cautions that "although a child may choose a reading picture over a picture of a nonreading activity, it does not mean that he will actually choose reading as a recreational activity."

Participants who are measured by means of reactive arrangements often become influenced by the very measurement devices themselves. Kerlinger (18) suggests that the resulting data can be influenced more by the actual measurement device than by the manipulation of the variables. It is attitudes in particular that are especially susceptible to such sensitizing. This situation would be of particular importance to researchers who use the classic pre-post test design. It is entirely possible that the pretest for measuring attitudes sensitizes the participants and therefore, contaminates the resulting post test data. (18) It is interesting to note that reactive effects do not contaminate experimental results on measures of academic achievement (2) Perhaps, then once attitude measurement becomes as commonplace in assessment as

achievement measurement, we will not have to be as concerned about sensitizing our subjects by using reactive pretests, as we are now. Until that time, at least in some research designs, we may have to rely more frequently on less reactive measures.

We can somewhat reduce the transparency of reactive measures by simply not announcing the purpose of the measurement. This is perhaps more easily done with younger children but with the growing sophistication of young students, it is not easy to mask our intentions.

Having cited possible limitations of reactive measures of the affective component of reading programs and procedures, let us now look more closely at those assessment measures that we have classified as nonreactive. We have defined physical evidence, observation and archival records as nonreactive measures because we do not have to rely on the cooperation of the respondents during the collection of data. The participants are not aware that they are being measured or assessed. (29)

In considering these nonreactive assessment measures, we must pose the same questions that we did when we considered reactive measures. What are we measuring and why are we measuring it? Are we defining reading in a global sense or in a very specific way? Our choice of measures will depend on our answers to these questions.

According to Weber (29, p.50), "The outstanding advantage of physical evidence data is its inconspicuousness." As an example of such data collection Weber cites the physical evidence that was collected from the Chicago Museum of Science and Industry

that was used as a measure of the relative popularity of the exhibits in the museum. By examing the floor tiles around the chick-hatching exhibit, it was discovered that these tiles wore out every six weeks while the floor tiles in front of many of the other exhibits in the museum lasted for years. The physical evidence of the worn tiles substantiated by the custodial records of the rate of replacement of the floor tiles were the indexes used to determine the relative popularity of the chick-hatching exhibit.

If one were interested in assessing students' feelings toward and interests in reading in terms of their reading habits, there does exists in schools the possibility of physical evidence. It is possible that the replacement rate of both hard and softback books in both the school library and in classroom libraries could be used as an index of the relative amount of reading that either goes on in the school as a whole or in specific classrooms. Does a check of the replacement rate indicate an increase or decrease as a result of program change? Do some classrooms replace their books more frequently than others? If the rate of replacing books was crosschecked with the checkout rates from the libraries and a correlation was found, it might be possible to suggest that the replacement rate was due to the wearing out of books because of use and not because of mistreatment. The relative popularity of books or magazines could also be tabulated if the replacement rate was categorized, for instance by title or subject area or by classifications such as fiction or non-fiction.

Systematic carefully planned observation carried out over a significant period of time can add to our knowledge of students'

attitudes toward and interests in reading. (1) This is especially true of the observation that is disguised so that the participants are unaware that they are being observed. In attempting to get an index of how much outside of school reading students engage in, we might position observers outside of classrooms or schools to systematically note and record the library type books students are carrying home. Or if we are interested in determining the amount of recreational type reading students do during their free time in school, we might systematically observe places such as the cafeteria, library, playground or study areas where students spend free time. We could then determine the amount of time students spend in recreational type reading activities during school hours.

Teacher observations can be an important and meaningful way to gather data about the affective component of our reading programs and instructional practices. As with all other forms of assessment, observation requires that areas to be measured be identified before the measurement begins. (1) It must be remembered that for such observational data to be significantly important it must be collected as discreetly as possible for as long a period as possible in as many different situations as possible. (12, 29)

There exist several observation checklists or scales that can be helpful guides for educators attempting to measure their students' affective growth in reading. A Scale of Reading Attitude Based on Behavior developed by Rowell (24) gives the observer the opportunity to rate students on a five point scale ranging from "always occurs" to "never occurs" in a variety of reading experiences. Reading behaviors are categorized as reading for pleasure, reading in the content areas and reading as it takes place in the reading

class.

For classroom teachers looking for a quick, uncomplicated assessment measure, Heathingon and Alexander (12) have developed a ten question yes/no answer observation checklist. The ten questions deal almost exclusively with behaviors that can best be classified as reading for pleasure or reading as a leisure time activity.

The Mikulecky Behavioral Reading Attitude Measure (22) is another observation checklist that attempts to assess attitudes toward reading in behavioral terms. It differs from the Rowell checklist in that rather than defining attitude toward reading in terms of positive and negative feelings only, it also attempts to identify the stage of attitude development according to Krathwohl's Taxonomy of the Affective Domain that the respondent has achieved.

When discussing self reporting questionnaires we suggested that instructional decisions could be made based on respondents' answers to individual items. The same point can be made while discussing teacher observation checklists. If the observer notes trends that develop during the observations, programs could be modified or instructional procedures changed. For instance, if few children are ever observed reading during their free time, perhaps, instructional procedures need to be reexamined in light of this knowledge.

Besides the careful, systematic observation that can become an integral part of a school's evaluation program, more spontaneous, less structured observation can also become a part of any teacher's diagnostic storehouse of information about students. We can become subtle observers of behaviors that can give us significant information about our students' reading attitudes and interests.

How many times have we witnessed a scene where a speaker is nearly drowned out by incessant coughs from a restless audience? How do our students respond during our reading activities? Are they busily engaged in language activities or is it a constant struggle to get them "to finish their work?" Can you hear a pin drop during story hour or are they fidgety and inattentive? Are their questions concerned with matters such as "May I go to the library?", "Do you have another story like this one?", "Have you read this book?" or are they the "Do I have to finish this page?", "Can I go to the bathroom?" or "What time is reading over?" variety?

Because it is so versatile, observation can play an important role in assessing students' attitudes toward and interests in reading. If our objective is to assess reading habits, we can design our observations to meet that need. If our goal is to assess attitudes toward reading defined in a more global sense, we can alter our observations so they include many different reading situations. When we are trying to measure attitudes toward and interests in a specific program or instructional procedure, we can structure our observations with this need in mind.

Archival records such as attendance reports, library circulation figures and records of disciplinary actions have possibilities as being indexes of students' attitudes toward reading. There are distinct advantages in using this sort of data in attempting to measure students' affective growth in reading. Because the data is part of the already existing records of a school, there is no expense in collecting specialized information. Since the data is not being collected specifically for the assessment, it is likely to be nonreactive. (29)

A number of researchers have relied on book counts to assess their subject attitude toward reading. Both Lawshe (20) and LaBrant (19) used library circulation figures as a measure of the effectiveness of a curriculum design that emphasized extensive rather than intensive reading. Fader and McNeil's (10) "Hooked on Books" program used the number of books read by students as a measure of affective growth. In place of a pretest designed to measure attitudes toward reading, Healy (11) used the number of books that her students read during the first semester of school as an index of their attitude toward reading.

In evaluating the effectiveness of an instructional procedure that emphasized time in school for free reading, Reed (23) used class attendance figures as an index of her subject's enthusiasm for the procedure. Disciplinary action reports can also be used to measure students' reactions to specific programs or procedures. Bumstead (5) reports that 95% of the disciplinary problems in a middle school were controlled after the introduction of an innovative curricular design. The possibilities for using archival records for nonreactive data collection when assessing affective growth in reading are limited only by the resourcefulness and creativity of researchers, program evaluators and classroom teachers.

In our discussion of reactive measures of affective growth we discussed several limitations of such data collection. There are, of course, limitations in using the nonreactive means of assessment, too. Certainly, we must be as rigorous in our attempt to control for possible sources of internal and external invalidity in such measures as we were in our reactive measures.

What then is the answer? How can we measure with some degree of certainty something as elusive and evasive as an attitude or an interest? What we need to do is to depend upon not one research method but rather a design that makes use of multiple measures. (2, 18, 29) No research method is without bias. Our chances for success in assessing attitude are greater if we use a variety of methods - admitting and accounting for the weakness of each method as we use it. (29)

As Webb (29, p.3) suggests, "The most persuasive evidence comes through a triangulation of measurement processes. If a proposition can survive the onslaught of a series of imperfect measures, with all their irrelevant error, confidence should be placed in it."

The multiple measurement model that we propose relies upon both reactive and nonreactive measures of affective growth. Happily we are in the midst of an era in reading education when more and more attention is being paid to creating and developing scientifically reliable and valid affective measurement instruments. At the same time, the possibility for the development of and reliance on nonreactive assessment methods holds great promise for the future.

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BIBLIOGRAPHY

1. Alexander, J. Estill and Filler, Ronald. Attitudes And Reading, Newark, Del.: International Reading Association, 1976.

2. Asher, William J. Educational Research And Evaluation Methods. Boston: Little, Brown and Co., 1976.

3. Askov, E. N. Development of an Instrument Measuring Attitude Toward Reading in Primary Pupils. Paper presented at the Annual Meeting of the American Educational Research Association. Los Angeles, 1969 ERIC ED027164

4. Bennie, Francis."Pupil Attitudes Toward Individually Prescribed Lab Programs". Journal of Reading, 18 (November, 1973),108-112.

5. Bumstead, Richard. "The Thaler System: A Slice-Of-Life Curiculum." Phi Delta Kappan, 59 (June,1978), 659-664.

6. Dulin, Ken and Chester, Robert. "A Validation Study Of The Estes Attitude Scale". Journal of Reading, 18 (1974), 56-59.

7. Dulin, Ken L. and Chester, Robert D. The Dulin-Chester Scale: A New Measure of Students' Attitudes Toward Leisure Reading. Paper presented at the National Reading Conference, New Orleans, LA, 1976.

8. Estes, Thomas. "A Scale To Measure Attitudes Toward Reading." Journal of Reading, 15 (1971), 135-142.

9. Estes, Thomas H. Attitude Toward Reading: Alternatives in Assessment. Paper presented at the Annual Reading Conference at Lehigh University, Bethlehem, PA., March, 1975.

10. Fader, D. and McNeil, E. Hooked On Books: Program And Proof. New York: Berkley Publishing Co., 1968.

11. Healy, Ann K. "Changing Children's Attitudes Toward Reading". Elementary English, 40 (March, 1963), 255-257, 279.

12. Heathington, Betty S. and Alexander, J. Estill. "A Child Based Observation Checklist To Assess Attitudes Toward Reading." The Reading Teacher, 31 (April, 1978), 769-771.

13. Heimberger, M.J. Sartain Reading Attitudes Inventory. Paper presented at the PA. Educational Research Association, Philadelphia, PA., 1970.

14. Hogan, Thomas P. Manual For Administering And Interpreting Survey Of School Attitudes. New York: Harcourt Brace Jovanovich, Inc., 1975.

15. Hudon, Sister Mary Oliver. An Investigation Of The Effectiveness Of Two Motivational Techniques For Promoting Interest In Reading Among Second Graders. Unpublished Doctoral Dissertation, University of Maryland, 1973. ERIC ED 095491

16. Hunt, Lyman. Updating The Individualized Approach To Reading: IRI Or IPR? Paper presented May, 1970. ERIC Ed. 044244.

17. Kennedy, Larry and Halinsky, Ronald. "Measuring Attitudes: An Extra Dimension." Journal of Reading, 18 (1975), 518-522

18. Kerlinger, Fred N. Foundations Of Behavioral Research. New York: Holt, Rinehart and Winston, INC., 1973.

19. LaBrant, L. An Evaluation Of The Free Reading In Grades 10, 11, 12. Columbia, Ohio: Ohio State University Press, 1936.

20. Lawshe, C. "Free Reading In Evansville." The Nations' Schools, 22, (1938), 21-22.

21. Long, B. and Henderson, E. Children's Use Of Time: Some Personal And Social Correlates. Baltimore, MD.: Goucher College, 1971.

22. Mikulecky, Larry. A Behavioral Approach To The Measurement Of Reading Attitude. Madison Wisconsin.

23. Reed, Kathleen. "Turning Urban Students On To Books". Unpublished paper, N. Easton, MA., 1978.

24. Rowell, C. Glennon. "Attitude Scale For Reading". Reading Teacher, 25 (February 1972), 442-447.

25. San Diego County Department of Education. An Inventory Of Reading Attitudes, 1961

26. Schotanus, Helen D. The Relationship Between Difficulty Of Reading Material And Attitude Toward Reading. Technical Report No. 29. Madison: Wisconsin Research and Development Center For Cognitive Learning, 1967. ERIC ED 016596.

27. Triandis, Harry C. Attitude And Attitude Change. New York: John Wiley and Sons, 1971.

28. Veatch, J. Individualizing Your Reading Program: Self Selection In Action. New York: Putnam, 1959.

29. Webb, Eugene; Campbell, Donald; Schwartz, Richard and Sechrest, Lee. Unobstrusive Measures: Nonreactive Research In the Social Sciences. Chicago: Rand McNally and Co., 1966.